who were referred for conventional invasive coronary angiography. Patients were eligible if they were ≥ 18 years of age. Patients with atrial fibrillation, contraindication to iodinated contrast agents, and serum creatinine values >1.4 mg/dl were excluded.

Coronary angiography was performed using standard 6Fr coronary catheters through trans-femoral or trans-radial approach. Coronary angiograms were evaluated by 2 experienced, independent observers. Coronary arteries were segmented according to guidelines of the American Heart Association 18 (modified 16-segment model, with segment 17 being intermediated branch of the left coronary artery).

12 patients were investigated by MSCT (Philips, 64 Slice, Philips, USA). After determination of the contrast agent transit time, a volume dataset was acquired (collimation 2640.6 mm, z-flying focal spot, gantry rotation time ms, tube current 400mAs/rotation, tube voltage 120kV) without application additional β-blocker medication to control heart rate. Contrast agent (60 to 80 ml, iodine 350 mg/ml) was injected at a flow rate of 5 ml/s. All scans were performed using electrocardiographically gated tube current modulation. Maximal tube current was limited to an interval 30% to 70% of cardiac cycle. Trans-axial images were reconstructed with 0.75-mm slice thickness, 0.5-mm increment, and a medium soft convolution kernel (B26f). The position of the reconstruction window within the cardiac cycle was individually selected to minimize motion artifacts. The best dataset was used for subsequent analysis.

RESULTS In total, 16 consecutive patients (75%men, mean ages 65years) with coronary artery diseases who underwent coronary angiography were included in the study. Six cases of single coronary artery (SCA) were found: including three cases of anomalous right coronary artery (RCA) originating from the proximal or mid of left descending coronary artery; left main coronary artery (LMCA) arising from the proximal right coronary artery one case; anomalous RCA originating from the distal of left circumflex (LCX) artery two cases. Ten cases of anomalous RCA were detected: including anomalous RCA arising from anterior wall of ascending aorta six cases and left sinus of Valsalva four cases respectively. Multi-slice computed tomography (MSCT) detected the origin and course of the anomalous coronary artery in 12 of 16 patients (75%).

CONCLUSION Coronary angiography is essential detecting methods to find coronary anomalies and MSCT clearly depict the origin and course of the anomalous coronary artery.

Keywords: MSCT. Coronary artery anomalies. Coronary angiography.

TCTAP A-178
Primary PCI with "Single" Catheter

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BACKGROUND The benefit of primary percutaneous coronary intervention (PCI) for acute ST segment elevation myocardial infarction (STEMI)is well documented and is closely tied to the door to balloon (DTB) time. To shorten the DTB time, we perform diagnostic angiography with IL-4.0 guiding catheter (Heartrail, Terumo Corporation, Tokyo, Japan) because we can switch to the primary PCI immediately following the full coronary angiogram with a single catheter.

METHODS We studied consecutive 31 STEMI patients who underwent primary PCI at our hospital from November 1st 2013 to November 15th 2014. All patients were radial artery approach and the patients with shock vital were excluded. Eight patients were performed diagnostic angiography withIL-4.0 (IL group), and other 23 patients were performed with JL-4.0, and JR-4.0(standard group). The cath lab to first device time was calculated.

RESULTS The cath lab to first device time was significantly faster in IL group compared with standard group (19.5 min vs. 38.3 min, p=0.0001).

CONCLUSION For STEMI patients, IL-4.0 catheter angiography shortens the DTB time and may improve the patients' outcome.

VALVULAR HEART DISEASE (TCTAP A-179 TO TCTAP A-182)

TCTAP A-179
Acute Complications Following Balloon Mitral Valvuloplasty – Analysis of 1450 Cases over 15-Year Period

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BACKGROUND Balloon mitral valvuloplasty (BMV) has in vogue for more than 3 decades. The complications of the procedure are well known. Few studies have analyzed the complications and its outcomes following BMV in a large cohort.

METHODS Single center retrospective data analysis of acute complications following BMV for 15years from 1998-2012.The study looked in to immediate 30 day outcomes following BMV. The data were retrospectively collected from hospital records.

RESULTS Data was available in 1450 patients (females 986) who underwent BMV. Mean age of patients was 23.7 years (±SD 5.8) (range 9-57 years) with mean follow up period of 9.7 years (±SD 4.6). Intervention resulted in successful BMV (more than 50% reduction in baseline gradient) in 1294(94%) subjects and partially successful BMV (20-50% reduction in baseline gradient) in 105 (6%) subjects. BMV failed in 51 patients. Mitral regurgitation (MR) was observed in 76 patients (3.85%). But acute severe mitral regurgitation requiring mitral valve replacement was noticed in 26 (1.79%) patients. On univariate analysis female sex, age ≥40 years, eccentric valve calcification and Wilkin's score ≥ 10 were more frequent in patients who developed acute MR. Moderate MR occurred in 37(2.55%) patients and mild MR in 41 patients (2.81%). Cardiac tamponade occurred in 19 patients (1.23%). Mild pericardial effusion was seen in 26patients and BMV was deferred in the three of these patients. New onset atrial fibrillation was encountered in 14 (1.018%) patients during and immediately after BMV. Five patients (0.3%) developed cerebrovascular accident with significant neurological deficits following balloon dilatation, which recovered gradually, and one patient had a transient ischemic attack. Coiled wire got detached in the left atrium in one patient and it was removed using a snare. There were 4 deaths. One patient with severe RV dysfunction died on table. Another patient died a week after failed BMV. Two patients died within a month of the procedure due to non-cardiac illness. Vascular complications occurred in 16 patients (1.1%) with retroperitoneal hematoma in one patient and 12 patients having groin hematoma. Femoral AV fistula developed in one patient, which required prolonged local compression. 2patients had profunda artery pseudo aneurysm managed with local embolization.

CONCLUSION The study shows excellent 30 -day outcomes for balloon mitral valvuloplasty with mortality rate of 0.1%. Major morbidities were acute severe MR (1.79%), cardiac tamponade (1.23%) and vascular complications (1.1%). The occurrence of Atrial arrhythmias and major strokes were noted at 1% and 0.3% respectively.

TCTAP A-180
Safety and Efficacy of Thrombolysis for Stuck Valve in Rheumatic Heart Disease - A Single Centre Experience

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BACKGROUND Rheumatic heart disease causes significant morbidity and mortality in many of Asian and African countries. The resultant corrective surgery for valve necessitates mechanical prosthetic valve implantation at an earlier age to these patients. Prosthetic valve implantation has its inherent problems and needs a proper oral anticoagulation with targeted INR throughout the life. Stuck valve is one of the major complications encountered in this set of patients who have suboptimal anticoagulation or interrupted anticoagulant therapy. Thrombotic occlusion and restriction of valve leaflet movements in mechanical valves often requires redo procedure which carries high surgical risk. Medically managing such patient with early thrombolysis and optimization of anticoagulation negates the need for redo procedure, if successful. Herewith we present a series of cases managed with thrombolysis for stuck valve Rheumatic heart disease patients.

METHODS This retrospective study analyzed 16 patients of Rheumatic Heart disease who underwent prosthetic valve implantation in mitral and aortic position and presented with stuck valve in our center since 2012.The age group ranged from 22 to 60 years with 6 males and 10 females. Patients commonly presented with worsening dyspnea of NYHA class III to acute pulmonary edema. After initial stabilization all patients underwent detailed echocardiographic evaluation and stuck valve is diagnosed if there is restricted prosthetic valve mobility with higher gradient across the valves. Visible thrombus and pannus, if any, were noted. Doubtful cases had fluoroscopic examination in catheterization laboratory to ascertain valve movement restriction. The last follow-up INR, detailed drug history, drug compliance,